

ABSTRACT

In layer structure 20 of a semiconductor laser of a surface emitting type, 21 and 24 represent an n-type contact layer made of n-type GaN and a p-layer made of p-type AlGaN, respectively. In the laser, an n-type DBR layer 22 made of n-type InGaN and a DBR layer 25 made of dielectric are formed on and below a InGaN active layer 23, respectively, each of which forms a reflection surface vertical to the z axis. By forming a reflection surface vertical to the z axis at each of on and above the active layer 23, a resonator is obtained. Here optical distance between two reflection facets are arranged to an integral multiple of half a oscillation wavelength. Consequently, the present invention enables to produce a semiconductor laser of a surface emitting type easier by far compared with a conventional invention.